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Observations of Meteors made on November 27, 1878. By Lord Lindsay and Dr. R. Copeland.

Curr. No.	Observer.	G.M.T. h m s	Size.	Began. R.A. °	Began. δ °	Ended. R.A. °	Ended. δ °	Remarks.
1	R. C.	10 24 0	...	39·5	+38	39·5	+34	
2	R. C.	10 39 ±	...	15	+36	12·5	+35	
3	R. C.	10 49 ±	...	57·5	+32·5	41	+35	
4	R. C.	10 50 30 ±	...	...	...	...	...	In *Cancer*, moving to the left, downwards.
5	L.	10 55 ±	...	27	+22	5	+15	
6	R. C.	11 2 12	2	82	+24	68	+13·5	
7	R. C.	11 6 7	3	28·5	+42	14	+37·5	
8	R. C.	11 8 50	...	...	...	...	...	Seen in *Gemini*.
9	R. C.	11 9 55	4	43	+28	50	+31	Path uncertain.
10	L.	11 27 0	2	57·5	−14	74	−23	
11	R. C.	11 55 50	...	65	+17	33	− 4	Path uncertain.
12	L.	11 59 ±	...	57	+32	40	+29	Path somewhat uncertain.
13	R. C.	12 17 35	...	...	...	...	...	Seen in *Ursa Majoris*.
14	R. C.	12 20 5	...	...	...	...	...	Seen in *Leo*.
15	R. C.	12 21 30	...	...	...	...	...	Seen in *Leo Minor*.

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16	L.	12	21	45	...	76	+46	110	+35	
17	R. C.	12	28	20	2	112	+31	131	+48	
18	L.	...		...	...	...	...	...	...	Seen.
19	L.	12	28	59	2	48	+49	43	+ 4	Moved on this line.
20	L.	12	36	35	...	79	+28·5	...	...	Nearly stationary; moved in direction 135° of position.
21	R. C.	12	42	29	3	106	+15	115	+12	
22	L.	12	44	45	...	66	+45	52	+43·5	Path about 10° long.
23	R. C.	12	50	30	3	105	+ 6	93·5	0	
24	L., R. C.	16	50 ±		...	130	− 1	148	+ 2	
25	L., R. C.	16	52	0	1	113	+ 6	117	− 4	
26	L., R. C.	16	55	40	2	11	+62	11	+54	
27	L.	17	1	33	3	82	+45	77	+48	
28	R. C.	17	1	51	2	84	+40	90	+35	
29	L.	17	3	45	...	15	+35	11	+60	Moved on this line.
30	L., R. C.	17	8	48	...	114	+28	112	+23	
31	L.	17	9	32	...	222	+75	76	+46	Moved on this line.
32	L.	17	18	19	...	20	+88·5	12	+60	Moved on this line.
33	L.	17	26	22	...	20	+88·5	319	+62	Moved on this line.
34	C.	17	35	17	2	107·5	+22·5	97	+16	
35	L.	17	37	15	2	183	0	182	−16	

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Observations of Meteors made on November 27, 1878—continued.

Curr. No.	Observer.	G.M.T. h	m	s	Size.	Began. R.A. °	δ °	Ended. R.A. °	δ °	Remarks.
36	R. C.	17	41	58	3	90	+42	85	+46·5	
37	L.	17	45	12	2	113	+ 6	83	− 3	Moved on this line.
38	R. C.	17	46	47	2	74	+53	67	+47	
39	L. C.	17	51	8	2	111	+65	111	+55	
40	L.	17	51	39	1	81·5	+21	66	+16	Slowish.
41	L.	17	54	30	3	81·5	+21	54	+24	
42	R. C.	17	55	35	2	45	+55	34	+48	
43	L.	17	56	10	3	11	+60	54	+24	Moved on this line.
44	R. C.	18	8	53	2	82	+53	70	+48	
45	R. C.	18	20	±	2	...	...	...	...	In *Crater*, moving southwards.

15 meteors emanate from a diffused radiant, at R.A. 96°, Decl. +23°.
7 belong decidedly to Heis's No. 19 in 0° + 90°.
37 paths were entered on the map which is in the B.A. Atlas.

Scarcely a single meteor was seen which could be attributed to the Biela radiant, but as the period of the comet is about 6 years and 202 days, a return of the meteors would hardly be considered probable. In 1885, November 27 will fall only forty days short of two periods since November 27, 1872, and will afford the best chance that can occur during the remainder of this century.

Dun Echt Observatory,
Nov. 29, 1878.

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